CLEAN COPY OF THE CURRENT CLAIMS

1. A layered low dielectric constant nanoporous material comprising:

a first layer juxtaposing a substrate;

a second layer that is nanoporous and juxtaposing the first layer; and

an additional layer partially juxtaposing the second layer.

2. The material of claim 1, wherein the low dielectric constant material has a dielectric constant no more than 2.5.

3. The material of claim 1, wherein the first layer substantially comprises a nanoporous material.

4. The material of claim 8, wherein the polymer is organic.

5. The material of claim 4, wherein the polymer comprises polyarylene ether.

8. The material of claim 3, wherein the nanoporous material comprises a polymer.

10. The material of claim 1, wherein the second layer substantially comprises a nanoporous polymer.

11. The material of claim 10, wherein the polymer comprises at least one of a polyarylene ether or an adamantane-based compound.

12. The material of claim 1, wherein the additional layer comprises an organic compound.

13. The material of claim 12, wherein the organic compound substantially comprises at least one of a polyarylene ether or an adamantane-based compound.

14. The material of claim 1, wherein the nanoporous material comprises voids having a mean diameter of less than 100 nanometers.

15. The material of claim 1, further comprising a layer of metal wire between the substrate and the first layer.

17. The material of claim 15, wherein the ~~metal~~ wire is aluminum or copper.

34. The material of claim 3, wherein the nanoporous material comprises an adamantane-based compound.